

Twitter Thread by Bill Hanage



Bill Hanage

@BillHanage



I've thought long and hard about this. There is a constellation of circumstantial evidence around the most recently identified variant P.1, and what has been happening in Manaus, Brazil which makes me very seriously concerned. A thread ■

First Manaus has already been very hard hit by the pandemic. News reports in earlier stages told of rushed burials and bodies piling up <https://t.co/sMkOwCmzVx>

The crucial thing was the rapid rates of transmission, not really mitigated by 'flattening the curve' any. total per capita mortality was not as high as might be expected elsewhere, but only because the age structure of the population in Manaus skews young <https://t.co/pZ43BPloj3>

(I just did the calculation, the numbers of deaths are quite consistent with independent estimates of age stratified IFRs as per <https://t.co/FlvXNRuECE>)

By October 2020, 76% of the population were estimated to have been infected. This is based on a convenience sample of antibodies found in blood donors. I don't like convenience samples and the true figure might well be lower, but not a lot lower <https://t.co/gJ3nRJ19hL>

That's a large proportion, one might reasonably expect some degree of 'herd immunity', achieved at great cost. So given all that immunity, what's happening in Manaus now? There's actually an 'eruption' of infections, O2 shortages and escalating deaths <https://t.co/8RSmY9MmVy>

At the same time, the variant P.1, which I wrote about a couple days ago, has been identified.

<https://t.co/M3r8hjlMKh>

There is a new variant clearly identified today, P.1. And it is worth saying a little about what we have learned about it, and from the variants we have identified so far <https://t.co/VolZtrljFr> 1/quite_a_few

— Bill Hanage (@BillHanage) January 13, 2021

There's not great sampling at present from the earlier stages of the pandemic in Manaus, so a lot may have happened evolution wise off camera, but the P.1 lineage is not recorded before November. It was 42% of samples from 15-23rd Dec
CAVEAT not large numbers

I often complain that sampling doesn't account for sample size, bias etc. If this were a regular mutant, and somewhere other than Manaus, I'd be complaining loudly. As it is I think we need to pay close attention

None of this is good but what does it mean? Well first Manaus shows what a 'herd immunity' strategy looks like in the absence of a vaccine: a huge amount of illness and death, a significant amount among those who cannot be callously written off as having 'comorbidities'

The factors favoring the emergence of P.1 in Brazil are not clear. If it's like similar variants it may well be more transmissible. But is that enough in a place where you'd expect existing immunity to act as a brake? I don't know right now

We should be watching P.1 very closely indeed for data on both immune escape, and a different spectrum of severity from what we're used to. I really hope this turns out to be a data artefact of some kind but worried it won't. And the virus travels well

Especially when you close the stable door after... sigh

/end